An
Inaugural Dissertation
On
Scrophula,
Submitted to the examination of the
Trustees & Medical Professors
of the
University of Pennsylvania
For
The Degree
of
Doctor of Medicine

By, Stephen Davis
of
Warrenton, North Carolina

Philadelphia, April, 1811.

Scrophula, or Kingsevil. —

The subject which, I have chosen for this essay, although, much Canvassed by almost every Writer on Medicine & Surgery, has not (in my opinion) been explained on such principles, as Will lead to Correct or successful practice; And as the Cure of disease has always been Justly Considered as the Ultimate object of Physic; I shall attempt such a view of the subject, as Will tend to more Uniform success in the treatment of this distressing Complaint. I shall, in the first place, briefly notice, the theories of some of the Most Modern Writers on this disease, & secondly, attempt to explain its phoenomena, on the principles, taught, on

this University, by Doctor Rush.

Scrophula being, by no means, an Uncommon disease in this Country, particularly in the Southern States, is so well known, that it is almost unnecessary here, to give any description of it. The scrophulous inflammation, as described by Mr. Burns, is marked, by a soft swelling of the affected part, which very frequently, is one of the Lymphatic glands. The Covering, or Coat of the gland, becomes slightly thickened, and its substance more porous and doughy. The swelling increases, and the doughy feel changes, by degrees, into that of elasticity, or fluctuation, and a firm Circumscribed, hardened Margin, Can be felt round the base of the tumour. The skin is slightly red. If at this time an incision or puncture be made, either, no

matter, or very little is evacuated, the lips of the wound inflame and open, displaying a slough-looking substance within; and between this and the skin, a probe can often be introduced for some way all round. — If however the disease should have advanced further, then there is very little elasticity in the tumour, it is quite soft, rather flaccid & fluctuates freely; the skin becomes of a light purple colour, and small veins may be seen ramifying on its surface. Some time after these appearances are observed, the skin may be felt becoming thinner at one particular part, and here it also generally becomes of a darker colour; It afterwards bursts, and discharges a thin fluid like whey, mixed with a curdy matter, or thick white flocculi; the redness of the skin still continues, but the aperture ~~still contracts~~ enlarges as the tumour,

subsides, thus producing the Scrophulous ulcer. The Margins of this kind of sore, are generally smooth, obtuse, and overlap the ulcer; they are of a purple Colour, and rather hard & turned. The surface of the sore is of a light red Colour, the granulations are flabby and indistinct, and the aspect is of a peculiar kind, which, says Mr. Burns, Cannot be described. The discharge is thin, slightly ropy & copious, with Curdy-looking flakes. The pain is inconsiderable. — When this ulcer has Continued for some time, it either begins slowly to Cicatrize, or (as more frequently happens) the discharge diminishes, and becomes thicker; An elevated scab is next formed, of a dirty white, or yellowish Colour, this Continues on the part a Considerable time, and when it falls off, leaves the place Coverd with a smooth purple Cicatrix. — Mr Burns adds that the preceeding Description, Corresponds to the Mild Scrophula. — He

next remarks that occasionally, especially if a bone be diseased below the ulcer, the sore has a more fiery appearance, the surface is dark coloured, the margins soft, elevated, inflamed & sometimes retorted. The discharge is watery, the pain very considerable, and the surrounding skin inflamed; this has been called the Scrophula Maligna. — These are the principal symptoms, when the disease shews itself externally; but as similar affections of the Mesenteric glands uniformly accompany, or precedes the external marks, it is evident that the habit of body must decline. Mr. White, says, the flesh will become loose and flaccid, the countenance pale, and a general languor & disinclination to exercise of every kind, particularly in the morning will prevail, the appetite will vary, sometimes it will be good, at other times indifferent; an unusual degree of thirst—

will be experienced, Considerable heat will be excited upon the skin, particularly the palms of the hands; the breath will often be offensive; the Bowels will be affected with an Uneasy sensation; and the size of the belly will be increased, principally by wind; the pulse will be quick & small; and the lassitude so ~~great~~ much increased, that the patient will be unwilling to change the position in which he is placed. These symptoms Mr. White observes, most Commonly precede the swelling of the Lymphatic Glands externally. ——— As these symptoms sufficiently characterize the disease, it is unnecessary to add more.—

Scrophula, generally shews itself during infancy, between the age of three & seven years, tho, this is by no means uniformly the Case; Mr White has seen it from the age of four days to sixty years & upwards.

I have seen it from twelve to thirty years, and my friend Mr. Murray, informs me he has seen it in a man of fifty in Virginia. It prevails mostly in Marshy Countries and middle latitudes, hence the reason of its more frequent appearance in the southern states. Persons who have fineskins, delicate Complexions, grey or blue eyes & light hair, are said to be most subject to this disease; but that this is not the Case, has been proved by the observations of Mr. White, Mr. Carmichael and many others; also from the fact that, in the southern states, ten negroes are affected with it, to one white person; this is also the Case in Philadelphia, as I am informed by Mr. Elmer of the Philadelphia Dispensary; this fact clearly proves the influence of cleanliness, diet, dress &c. in producing the disease. It is not Communicable from one

person to another. Different Animals are subject to it, as Hogs, Horses & sheep. —

~~that~~ most writers on Scrophula, Consider it as differing from the generality of diseases, by the Circumstance of hereditary transmission, viz, they Conceive it to depend on a Certain habit of body, tainted with some peculiar disease derived from one or both Parents; the Common opinion is, that this Acrimony or virus, resides in the blood; and though sometimes apparently extinguished, yet Actually exist during life, and that its unhappy Consequences are transmitted from generation to generation: several more modern writers have gone great lengths to disprove this absurd opinion, but in doing so, they have fallen into the opposite extreme. It is Certainly as much a hereditary disease as any other, viz, it is so, as far as predisposition, (by which is meant a

preternatural aptitude to disease in any particular part of the body, founded on debility either native or acquired) can descend more or less completely from parent to child. - thus when two persons of a delicate form of body have children, it is natural to expect a similar delicacy in their offspring, but it does not follow of course that this will be the case, there is only a predisposition given, which may be overcome by proper treatment &c.

In like manner, if one parent or both be scrophulous, the child will very probably be so, but this is no proof of any existing disease or virus; there is a susceptibility, or predisposition, which may, or may not, be converted into disease, according to the force of the remote & exciting causes applied. It is a fact fully ascertained,

however, by most writers on Scrophula, as well as by my own observations, that it runs very much in certain families; but at the same time, it is equally well known, that the Children of Scrophulous parents, often continue as long as they live, entirely free from the disease; and that one child is sometimes afflicted, while its Father, Mother, Brothers, Sisters, and all the rest of its relations, have never had any symptoms of the disease; - all these facts are to be accounted for, only, by a knowledge of the predispositions, and the various combinations and changes they are capable of undergoing. ——— Authors have differed much in opinion, with respect to what they call, the proximate Cause of this disease. Galen & his followers, thought

it arose from a cold pituitous matter, producing tumefaction by stagnating in the glands. Others, imagining a determinate quantity of solids and fluids to be necessary to the formation of the human body, and its preservation in health, have ascribed this, and a variety of other diseases to a redundant quantity of the fluids. Avicenna supposed it arose from melancholy. Wiseman maintained that the proximate cause depended on a prevailing acidity in the serous part of the blood. Doctor Cullen, convinced, that a simple redundancy of any particular humour could not produce scrophula, had recourse to the supposition of a peculiar acrimony of the fluids. Mr. B. Bell, says that whatever may be the exciting or predisposing causes of scrophula, the disease itself either depends

upon, or is intimately connected with a debility of the Constitution in general, and probably of the lymphatic system in particular. He says that he is induced to believe this, from the remedies which have been found most serviceable in the Cure, being all of a tonic, invigorating nature.—

It would be tedious and useless to expatiate on the many absurd notions which have been entertained by various other writers: I shall only mention those of Mr. White, and Mr. Carmichael, each of whom, has taken considerable pains to inforce their opinions. The former, supposes it to arise immediately from obstructions in the lymphatic system, most frequently occasioned by a viscidity of lymph, or that fluid contained in the lymphatic system. The latter, has written a treatise, dated Feby. 1810.

professedly, to prove the proximate Cause to be disorder of the digestive organs, producing Acetous fermentation in the primae viae; but in what manner this Can excite the phoenomena of Scrophula, he says (himself), would lead to idle speculations to Conjecture. He says, that the advantages derived from alkaline Medicines, and Animal food in Scrophula, justify the opinion that it arises from an excess of acid in the body.—

These, without adding any more, may be sufficient to shew the Contrariety of opinions that have been entertained on this subject; That none of them, are founded on Reason, or Correct principles, is evinced, by the inefficacy of the numerous & widely different Medicines which they have recommended, for uniform success in the treatment of the disease. —

‡ marsh & hut & what Cases of them producing
Scrofula

I believe, with Doctor Rush, that Scrophula is a misplaced state of fever; that it is originally an arterial disease, thrown on the Lymphatic system, from predisposing debility in those parts; and that this debility is either native or acquired. —

That it is a misplaced state of fever, I infer, 1st from its remote and exciting causes; which are, Marsh & human miasmata; Certain aliments which act by their quantity or quality; too much or too little food; food of unwholesome qualities; improper dress; worms; Costiveness; suppression of perspiration; sedentary life; undue exercise of the understanding; different passions of the mind; heat & cold succeeding each other &c. — 2nd I infer it, from its first symptoms; which are dry skin; red and clean, or furred tongue; swelled, black,

and spongy Gums; Corded & tense, or feeble and frequent pulse; and from its sometimes suddenly producing death. 3rd I infer its being originally a febrile disease, from its affecting all ages, colours, sexes & habits. 4th I infer it, from its affecting, ~~all other~~ animals, besides Man, particularly Hogs, Horses and Sheep. It is an endemic at Barbadoes and is called a glandular disease†. It affects different glands, sometimes the testes, Mesenteric glands, liver, eyes, bladder, ovaria & intestines, sometimes even the teeth & bones. - The above Circumstances taken together so fully prove the identity of Scrophula and Fever, that it is unnecessary to Cite any more. There is Certainly no more reason for attaching any specific character to this disease, than to those forms of Morbid excitement Called Gout & Rheumatism, which are now

† Rush. -

generally acknowledged to depend on morbid or irregular action of the blood-vessels. —

Cure.

From the variety of opinions entertained, respecting the proximate Cause of this disease, we would naturally expect great diversity of practice; Accordingly we find that there is scarcely a Medicine, which has not been reputed as useful; the whole Materia Medica, both ancient and modern has been ransacked for a specific; and in no disease do Physicians differ more about the Cure than in this. Doctor Cullen recommends Mineral Waters & the Bark, which however he had not much Confidence in. He says that in several instances the leaves of Coltsfoot appeared to him to be successful; He speaks decidedly against the use of Antimony and Mercury. — Mr Burns says that the peruvian Bark is often ineffectual, because

improperly administered; that in order to obtain the benefits of the specific Action of the Bark, it should be given in large quantities, and Continued for several weeks, with a good diet, air, and proper exercise. Mr White says the general idea of Scrophula, ~~being~~ is, that it is a disease of debility, and therefore the great object is to invigorate the habit by every possible Means, the chief of which are tonic Medicines and sea bathing; Some are of Opinion that, in the Case of young patients, this should be continued, during the summer Months, every year to the age of Fourteen or Fifteen; Many recommend it not only during the summer, but throughout the year; whilst others are for administering alteratives, principally the alkaline salts, with or without antimonials, and the different tonics, during the winter, and the sea water, or sea bathing or Cold bathing during the summer, for a

Continuance of two or three years from the Commencement of the disease; with this general observation; that they will outgrow the Complaint. —
As to Regimen, some recommend a milk and Vegetable diet, others recommend Animal food and fermented liquors.- Various other modes of practice might be mentioned, some condemn Mercury, and praise the Bark; some condemn Bark and speak in the highest terms, of Calomel & Rhubarb, Carbonate of lime, Soda &c. — They are, as Doctor Rush observes, all wrong, and they are all right! Viz they have done good or harm, according to the state of the system, when they were given.

It is strange that attention to the state of the system, as indicated by the pulse, has hitherto been altogether neglected by writers on this disease; a circumstance, which can only be attributed to the influence of the popular opinion, that

it depends on a peculiar acrimony of the fluids transmitted from parent to child, and therefore attention to the general state of the system, would be superfluous in a disease, which could only be combated by such means, as would be capable of subverting its supposed origin; or in other words by those remedies which from their unknown mode of operation, have been denominated specifics.

But if the theory, which I have given be correct, our only hope for uniform success, is to keep a steady eye on the pulse, and to treat the diseases, as we would Gout, Consumption, or any other form of Fever, by changing our medicines with the varying forms of the disease; for certainly a typhus pulse, requires the same mode of treatment, whether it occur in Fever, Gout, Consumption or Scrophula; — In no disease, is a change of medicines more often necessary than in this; because the system

so often changes. —

The Remedies, for Scrophula, may be divided 1st into such as are proper in its state of great, and 2nd into such as are proper in its state of Weak, Morbid Action. To the first general head, belong, 1st Blood Letting; If the pulse be full or tense this will be necessary, not only at the Commencement of the disease, but after it has Continued for any length of time; Were this noble Remedy more often used in the Diseases of Childhood, we should have fewer Melancholy proofs of Miserable old age. — 2nd Cathartics, these should be frequently repeated; they act not only by discharging acrid faeces & Bile, but by inviting Morbid excitement to the Bowels; also by lessening the quantity of blood. Many Cases might be mentioned where this remedy alone, has performed the Cure. the best purgatives for children, are Calomel & Rhubarb, or Calomel & the root of the May apple. 3rd Emetics, may

be useful, by discharging acrid matters from the stomach; and by lessening the action of the Blood-vessels. 4th Diaphoretics, are highly recommended in this disease, they act by keeping up the moisture of the skin, and by equalizing excitement. 5th Blisters or Issues; that these may prove highly beneficial, may be presumed, from a fact, mentioned by Doctor Devereux. T. Claiborne, in his Inaugural Dissertation On the use of Artificial Drains, in the Cure of diseases; "A Negroe Boy aged 13, who had, long had running Scrofulous ulcers on his neck, which it appeared impossible to Cure, accidently received a Burn, on the abdomen, but below the Umbilicus, which was succeeded by a profuse discharge of pus; during this time, the ulcers on the neck readily Cicatrized, but recurred so soon, as the Burn was healed; He asks might not a drain established on a Convenient part, act efficaciously, by suspending or

diverting diseased action from the neck, and thereby allow our Medicines, a better chance of producing beneficial effects?

To the second general head, belong 1st, Peruvian Bark, or if this be not agreeable to children, Colombo, Gentian, Cornus florida, or the bark of Dogwood root, and many other tonic vegetable substances. — 2nd The filings or rust of Iron; 3rd Carbonate of Lime and Soda; 4th Common salt; 5th Calomel with or without opium; 6th generous diet, exercise, Muriate of Lime & Barytes, Change of Climate &c. —

Arsenic may very probably be so managed as to prove a valuable remedy in this disease: —

These Medicines properly prescribed and judiciously administered, will be equal to the cure, not only of the mild, but many of those cases, which are frequently despaired of, and given over, with the common, though false, assertion "that they are

incurable". It would be useless, and lead me beyond the limits assigned to this essay, to notice the numerous external applications that have been recommended in different stages of Scrophulous ulcers. It may be sufficient to observe that all stimulating and irritating applications, should be avoided; and that, the dressings should be of the mildest kind; unless the tumors shall have become indolent. —

I must now offer my sincere thanks, to the Professors; not only for the benefit derived, from their several lectures; but for other favours received. —